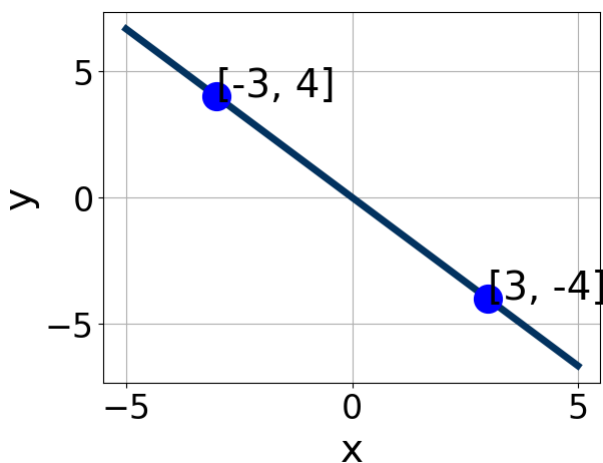


1. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-6x - 7}{8} - \frac{3x + 9}{7} = \frac{-5x - 9}{4}$$

- A.  $x \in [-39, -36.6]$
  - B.  $x \in [-0.8, 0.2]$
  - C.  $x \in [97.1, 99]$
  - D.  $x \in [-2.6, -1.1]$
  - E. There are no real solutions.
- 

2. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [0.33, 2.33]$ ,  $B \in [-1.2, 0.9]$ , and  $C \in [-3, 6]$
  - B.  $A \in [0.33, 2.33]$ ,  $B \in [0.2, 2.1]$ , and  $C \in [-3, 6]$
  - C.  $A \in [3, 5]$ ,  $B \in [2.9, 4.9]$ , and  $C \in [-3, 6]$
  - D.  $A \in [3, 5]$ ,  $B \in [-4.6, -2.1]$ , and  $C \in [-3, 6]$
  - E.  $A \in [-5, -1]$ ,  $B \in [-4.6, -2.1]$ , and  $C \in [-3, 6]$
- 

3. Find the equation of the line described below. Write the linear equation

in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Parallel to  $5x + 6y = 12$  and passing through the point  $(9, 2)$ .

- A.  $m \in [-1.23, -0.94]$   $b \in [6.2, 11.4]$
  - B.  $m \in [-0.98, -0.67]$   $b \in [-10.7, -8.1]$
  - C.  $m \in [-0.98, -0.67]$   $b \in [6.2, 11.4]$
  - D.  $m \in [0.59, 0.84]$   $b \in [-6.6, -2.7]$
  - E.  $m \in [-0.98, -0.67]$   $b \in [-7.4, -6.1]$
- 

4. Solve the equation below. Then, choose the interval that contains the solution.

$$-7(-11x + 8) = -9(-5x - 4)$$

- A.  $x \in [-0.79, -0.5]$
  - B.  $x \in [0.45, 0.7]$
  - C.  $x \in [2.28, 3.02]$
  - D.  $x \in [-0.02, 0.34]$
  - E. There are no real solutions.
- 

5. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Perpendicular to  $7x - 4y = 12$  and passing through the point  $(-8, -10)$ .

- A.  $m \in [-0.8, -0.5]$   $b \in [14.57, 15.57]$
  - B.  $m \in [-0.8, -0.5]$   $b \in [-4, 0]$
  - C.  $m \in [-2.2, -1.59]$   $b \in [-15.57, -10.57]$
  - D.  $m \in [-0.8, -0.5]$   $b \in [-15.57, -10.57]$
  - E.  $m \in [0.38, 1.39]$   $b \in [-8.43, -4.43]$
-

6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{9x - 8}{7} - \frac{9x + 5}{3} = \frac{-9x - 7}{4}$$

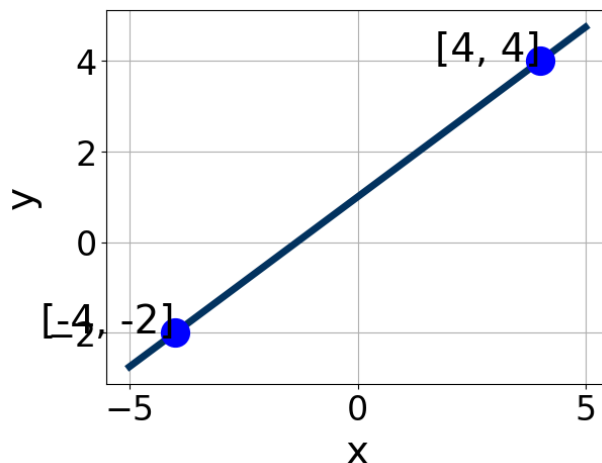
- A.  $x \in [-4.3, -3.1]$
  - B.  $x \in [9.5, 12.2]$
  - C.  $x \in [-0.6, 0.4]$
  - D.  $x \in [1.2, 3]$
  - E. There are no real solutions.
- 

7. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(-10, 10) \text{ and } (-8, -4)$$

- A.  $m \in [-7, 0]$   $b \in [15, 26]$
  - B.  $m \in [2, 13]$   $b \in [49, 59]$
  - C.  $m \in [-7, 0]$   $b \in [2, 6]$
  - D.  $m \in [-7, 0]$   $b \in [-64, -56]$
  - E.  $m \in [-7, 0]$   $b \in [57, 66]$
- 

8. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [2.6, 5.1]$ ,  $B \in [-4.19, -2.6]$ , and  $C \in [-5.2, -2.9]$   
 B.  $A \in [-2.4, 2.1]$ ,  $B \in [-1.84, -0.71]$ , and  $C \in [-1.1, 0.7]$   
 C.  $A \in [2.6, 5.1]$ ,  $B \in [2.4, 4.21]$ , and  $C \in [2.8, 4.9]$   
 D.  $A \in [-2.4, 2.1]$ ,  $B \in [0.92, 1.29]$ , and  $C \in [0.7, 1.2]$   
 E.  $A \in [-3.2, -1.6]$ ,  $B \in [2.4, 4.21]$ , and  $C \in [2.8, 4.9]$

9. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(-9, 11) \text{ and } (-2, -10)$$

- A.  $m \in [-5, 0]$   $b \in [-24, -13]$   
 B.  $m \in [-5, 0]$   $b \in [-8, -7]$   
 C.  $m \in [-5, 0]$   $b \in [14, 17]$   
 D.  $m \in [1, 5]$   $b \in [-6, -3]$   
 E.  $m \in [-5, 0]$   $b \in [20, 24]$

10. Solve the equation below. Then, choose the interval that contains the solution.

$$-10(-5x - 3) = -8(-9x - 12)$$

- A.  $x \in [-7.5, -4.6]$
  - B.  $x \in [-1.2, -0.3]$
  - C.  $x \in [5, 6.7]$
  - D.  $x \in [-4.3, -2.1]$
  - E. There are no real solutions.
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